Attorney Docket No. F-727-DIV (ATOF – 30032-2-DIV)

AMENDMENT

Remarks

Claims 34-60 are pending in the application. Claims 34 and 45 have been amended. Claim 35 has been cancelled. Claims 40-42, 46-50 and 52-56 have been withdrawn from consideration.

With respect to the rejection of claim 44 under 35 U.S.C. §112, second paragraph, Applicants submit that the Examiner meant to refer to claim 45, as there is no reference to a plaster article in claim 44. Claim 45 has been amended, however, to provide further clarification. Claim 45 is believed to be acceptable as currently amended.

The Examiner has rejected pending claims 34, 36-38, 39, 43-45, 51 and 57-58 as being anticipated under 35 U.S.C. §102(b) or obvious under 35 U.S.C. §103(a), based upon the reference Palackal et al. (EPO 0 628 577).

An invention is said to be "anticipated" only if each and every element set forth in the claim is found, either expressly or inherently, within a single prior art reference.

Verdegall Bros. V. Union Oil Co. of Cal., 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053

(Fed. Cir. 1987). The fact that a certain characteristic may occur or be present in the prior art is not sufficient to establish inherency of that characteristic. In re Rijckaert, 9

F.3d 1531, 1534, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993) (emphasis added). Mere possibilities or even probabilities are not enough to establish inherency. See Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 20 U.S.P.Q.2d 1746 (Fed. Cir. 1991).

Furthermore, in order to establish a prima facie case of obviousness, the prior art references must teach or suggest all of the claim limitations when combined. See In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974); and MPEP 2143.03.

Applicant submits that Palackal fails as an anticipatory reference because it does not show or teach each and every element of Applicants' claimed invention. Palackal discloses a polymer prepared with a catalyst system including a cyclopentadienyl-fluorenyl or a fluorenyl-fluorenyl group, which is a normal "sandwich" structure. In the present invention, the catalyst is based on a "half-sandwich" structure. The resulting polymer is quite different, as discussed in the two disclosures. For example, both discuss a silyl bridge. In Palackal, it is stated at page 11, lines 20-27 that the silyl bridge will lead to a polymer having a short syndiotactic blocks that lead to unusual physical properties.

Attorney Docket No. F-727-DIV (ATOF - 30032-2-DIV)

AMENDMENT

In contrast, it is disclosed at page 12, lines 2-3 and at page 16, lines 7-12 of Applicants' disclosure that there are long syndiotactic blocks, or that there are short atactic sequences in a predominantly syndiotactic polymer chain.

A further difference between the polymers prepared with the two different catalyst systems resides in their molecular weights. The weight average molecular weight is much larger for the polymers of the present invention than for those of the prior art, i.e. 120,000 vs. 60,000. Claim 34 has been amended to incorporate the limitation of claim 35, specifying the molecular weight as being at least 120kD.

Because Palackal fails to teach each and every limitation of the claimed invention, the rejections of claim 34, and those claims depending from claim 34, should be withdrawn.

The Examiner has further rejected claims 34-39, 43-45, 51 and 57-60 under 35 U.S.C. §103(a) as being obvious over Keller et al. (U.S. Patent No. 5,691,043) in view of Job (WO 90/12816).

The combination of these references also fails to teach and every element of Applicants' claimed invention. Job discloses, at page 4, lines 22-25, polymeric chains consisting of short blocks of isotactic units separated by syndiotactic units. These polymers are prepared with a Ziegler-Natta catalyst system comprising:

- the reaction product of a magnesium oxy compound and a tetravalent titanium halide,
- an organoaluminum compound, and
- a selectivity control agent.

The resulting polymers have a narrow distribution of relatively short blocks and they are characterized in Table 2. Table 2 discloses among other properties the melt flow index of the isotactic/syndiotactic block polypropylene.

It may be correct to state that there is an inverse relationship between the melt flow index and the molecular weight of a given polymer. It is inaccurate to generalize, however, from one type of polymer to another and from one method of measurement to another. For example, the melt flow index in Job was measured under a load of 2.16 kg

Attorney Docket No. F-727-DIV (ATOF – 30032-2-DIV)

AMENDMENT

(MI2), whereas the melt flow index in the present invention was measured under a load of 5 kg (MI5). Also, looking at Table 2 of the present invention, for measurements on different polymers with the same technique and under the same load, it can be seen that polymer D has a weight average molecular weight of 107,000 daltons and a MI5 of 15.5 dg/min and polymer E has a weight average molecular weight of 127,000 daltons and a MI5 of 19.4 dg/min. As stated earlier, the fact that a certain characteristic may occur or be present in the prior art is not sufficient to establish inherency of that characteristic. Nor are mere possibilities or even probabilities enough to establish inherency of a property or characteristic. No quantitative estimate of the polymer's molecular weight can be derived from its melt flow index measurement. Accordingly, this reference fails to teach the molecular weight, as presented in independent claims 34 and 60, and the combination fails to provide a prima facie case of obviousness.

Because the combination of Job and Keller fails to teach each and every limitation of the claimed invention, the rejections of independent claim 34 and 60, and those claims depending from them, should be withdrawn.

Applicants submit that they have fully responded to the Office Action.

Applicants submit that the application is in a condition for allowance. Favorable action is therefore requested. If the Examiner believes that the prosecution of the present application can be expedited by addressing any outstanding issues over the phone, Applicants would invite the Examiner to contact the undersigned at the phone number provided.

If any extension of time is necessary, such extension of time is hereby requested. If any fees are deemed necessary, the Commissioner is hereby authorized to charge them to Deposit Account No. 50-1899.

All future correspondence with respect to the above-referenced application should be addressed to:

Mr. David J. Alexander Fina Technology, Inc. P.O. Box 674412 Houston, Texas 77267-4412 Attorney Docket No. F-727-DIV (ATOF – 30032-2-DIV)

Date: October 06, 2003

AMENDMENT

Respectfully submitted

Grady K. Bergen Reg. No. 37,587

Griggs Bergen & Johnston LLP 2626 Cole Avenue, Suite 400 Dallas, Texas 75204-4075 (214) 665-9568

Attorney for Applicants

OFFICIAL

10